REMARKS

Claims 1, 3-5, 8-11, 14, 16, 18, 21-23, 26, 27, 29, and 32 have been amended. No claims have been added or cancelled. Therefore, claims 1-32 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Section 101 Rejection:

The Examiner rejected claims 1-32 under 35 U.S.C. § 101 for nonstatutory subject matter. Although Applicant traverses this rejection, in order to expedite prosecution, Applicant has amended the claims as indicated above. Applicant respectfully requests removal of the § 101 rejection.

Section 103(a) Rejection:

The Examiner rejected claims 1-5, 8-12, 14-19, 21-24 and 26-32 under 35 U.S.C. § 103(a) as being unpatentable over Carter et al. (U.S. Publication 2003/0051026) (hereinafter "Carter") in view of Janssens ("Inequalities in Fuzzy Probability Calculus"), and further in view of Smith et al. (U.S. Publication 2003/0172133) (hereinafter "Smith"), and claims 6, 7, 13, 20 and 25 as being unpatentable over Carter, Janssens and Smith and further in view of Cao ("A Deductive Probabilistic and Fuzzy Object-Oriented Database Language"). Applicant respectfully traverses these rejections for at least the reasons below.

Carter discloses a system that monitors and protects the security of computer networks [and that] uses artificial intelligence, including learning algorithms, neural networks and genetic programming, to learn from security events (Carter, abstract). The Examiner asserts that the term 'policy evaluation mechanism' as recited in the original claim 1 is equivalent to 'monitors', as disclosed in the abstract of the Carter reference. Applicants traverse this assertion, as 'monitoring…the security of computer networks' is clearly not equivalent to a policy-based automation mechanism as recited in amended

claim 1 of the present application. Amended claim 1 recites the policy-based automation mechanism as a mechanism for providing automated computer system administration in an information technology (IT) environment, wherein the policy-based automation mechanism is configured to: evaluate policies, each specifying a set of rules and a **process to be initiated** in the IT environment; generate a positive or negative answer and a confidence level in the answer; and **initiate the process** specified by the policy in the IT environment **if the positive or negative answer and the confidence level indicate that the process is to be initiated**. Thus, the policy-based automation mechanism is a mechanism for evaluating policies and selectively initiating processes in an IT environment based upon results of said evaluation. The policy-based automation mechanism of claim 1 is clearly the references to "monitors" and to a system for "monitoring…the security of computer networks" cited by the Examiner.

Amended claim 1 recites that each policy specifies a set of one or more rules and a process to be automatically initiated in the IT environment if an evaluation of the policy indicates that the process is to be automatically initiated. The Carter reference nowhere teaches or suggests that a "security policy" specifies a set of one or more rules and a **process to be automatically initiated in the IT environment** if an evaluation of the policy indicates that the process is to be automatically initiated. Thus, the policies recited in claim 1 are clearly different than "security policies" as disclosed by Carter.

Furthermore, **automatically initiating a process** based on results of a policy evaluation as is recited in amended claim 1 of the present application is **clearly and distinctly different** than Carter's "autonomously alter[ing] [security policies in response to ongoing events]". Whether "autonomously" is equivalent to "automated" is irrelevant. The two are clearly referring to distinctly different actions that produce distinctly different results.

The Examiner further asserts that Carter teaches program instructions executable by a processor to…access a policy and information relevant to an evaluation of the policy. The Examiner cites paragraph [0228] of the Carter reference in support of this

assertion, asserting that 'policy' as disclosed in the claim is equivalent to 'network surveillance and security systems' as disclosed by Carter, and that 'information relevant [to an evaluation of the policy]' as disclosed in the claim is equivalent to 'intrusion information' as disclosed by Carter. Applicant traverse these assertions. In regard to the Examiner's first assertion, Applicant fails to see how 'network surveillance and security systems' could possibly be considered 'equivalent to' a policy to be evaluated to provide automated computer system administration in an IT environment. Clearly, a policy is not a system, and a system is not a policy. In regard to the Examiner's second assertion, 'intrusion information' is nowhere described in Carter as 'information relevant [to an evaluation of a policy]'. Again, the two terms are simply not equivalent, contrary to the Examiner's assertion. Further, the Examiner has simply asserted that the above terms are equivalent, and has not provided any factual basis for said assertion.

Furthermore, Applicant notes that the amended claim 1 recites that each policy specifies a set of one or more rules and a process to be automatically initiated in the IT environment if an evaluation of the policy indicates that the process is to be automatically initiated, which further distinguishes policies as recited in claim 1 from the 'network surveillance and security systems' disclosed by Carter.

From the above, it is clear that Carter does not teach or suggest a system anything similar to what is recited in amended claim 1 of the present application. The Carter reference does not describe anything about a policy-based automation mechanism configured to evaluate policies specifying sets of rules and **processes to be automatically initiated in an IT environment** based on results of evaluations of the policies to provide automated computer system administration in the IT environment.

In further regard to claim 1, the Examiner admits that "Carter does not teach and evaluate the policy according to the information using two or more inference techniques." The Examiner goes on to assert that the Janssens reference teaches "and evaluate the policy according to the information using two or more inference techniques", and that "two or more inference techniques of applicant is equivalent to 'probability calculus' and

'fuzzy logic' of Janssens (Janssens, abstract). Applicant traverses this assertion. First, Applicant notes that the Janssens reference, in the abstract, refers to *one* inference technique (fuzzy probability calculus), not two techniques. This one technique (fuzzy probability calculus) is the subject of the Janssens paper, as is clearly indicated by the Title. Elsewhere, Janssens does mention "other applications of fuzzy logic." However, the Janssens reference, contrary to the Examiner's assertion, is clearly not teaching the use of two separate techniques for any particular application, but instead is describing "reformulating [Bell-type] inequalities in the context of fuzzy probability logic." Further, the Janssens reference, contrary to the Examiner's assertion, does not teach or suggest "two separate techniques for evaluation."

Furthermore, contrary to the Examiner's suggestion, nowhere does the Janssens reference teach or suggest anything like evaluating policies to provide automated computer system administration in an IT environment using two or more inference techniques. Nor does Carter, alone or in combination with Janssens, teach or suggest anything like evaluating such policies using two or more inference techniques.

In the Final Office Action, in response to the above arguments the Examiner states that "Applicant admits that Janssens mentions both 'fuzzy logic' and "fuzzy probability calculus' which are two inference techniques." Applicant, of course, admits the existence of multiple inference techniques. However, the fact that the Janssens reference happens to mention two inference techniques is irrelevant. What is relevant, as previously indicated by Applicant, is that neither the Janssens reference nor any of the other references alone or in combination **teach or suggest the application of two or more inference techniques for policy evaluation in an IT environment**. The Janssens reference describes "reformulating [Bell-type] inequalities in the context of fuzzy probability logic", is not directed at any specific application of fuzzy probability logic, and certainly does not teach or suggest the application of two or more inference techniques for any purpose. More specifically, the Janssens reference, contrary to the Examiner's assertion, does not teach or suggest anything like the application of "two separate [inference] techniques for evaluation" (of policies or of anything else). The

Examiner's assertion that the Janssens reference teaches "and evaluate the policy according to the information using two or more inference techniques" is **clearly** without basis in the actual teachings of the references. Janssens teaches or suggests no such thing.

The Examiner asserts that "It would have been obvious to a person having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Carter by using two separate techniques for evaluation as taught by Janssens to evaluate the policy according to the information using two or more inference techniques." However, Applicant reminds the Examiner that "to support the conclusion that the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references..." *Ex Parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Int'f 1985). Applicants note from the above traversals of the Examiner's rejections that the Examiner has failed to establish that Carter "expressly or impliedly suggests" anything like what is disclosed in claim 1 of the present application, nor has the Examiner done so for the Janssens reference or any other art of record. Further, neither the Carter reference nor the Janssens reference "expressly or impliedly suggest" what the Examiner asserts the references teach. Nor does any art of record expressly or impliedly suggest a combination of the two references that would produce anything like what is disclosed in claim 1 of the present application. Nor has the Examiner presented a convincing line of reasoning as to why an artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

In further regard to claim 1, the Examiner admits that "Carter and Janssens do not teach to generate an answer and a confidence level for the policy evaluation. The Examiner goes on to assert that "Smith teaches to generate an answer and a confidence level for the policy evaluation", citing the abstract. From the abstract, what the Smith reference teaches is a "helpdesk service" that receives requests for help from users,

searches a knowledge base for solutions, and assigns confidence levels to each potential solution found by the search. What Smith teaches is clearly and distinctly different than a policy-based automation mechanism that evaluates policies to provide automated computer system administration in an information technology (IT) environment, and that evaluates a policy according to information relevant to the policy using two or more inference techniques to generate a positive or negative answer and a confidence level in the answer, and that initiates a process specified by the policy in the IT environment if the positive or negative answer and the confidence level indicate that the process is to be initiated, as recited in amended claim 1 of the present application.

The Examiner goes on to assert that "It would have been obvious to a person having ordinary skill in the art at the time of the applicant's invention to modify combined teachings of Carter and Janssens by generating a confidence value for a given solution as taught by Smith to generate an answer and a confidence level for the policy evaluation." Again, as noted above, combining the teachings of Carter and Janssens would not produce what is claimed in claim 1 of the present application, and in any case no evidence of record suggests combining the two references, nor has the Examiner presented a convincing line of reasoning as to why an artisan would have found the claimed invention to have been obvious in light of the teachings of the references. Even if the two references were combined, the result would not be what is disclosed in claim 1 of the present application. In addition, there is no evidence of record suggesting combining the three references, nor has the Examiner presented a convincing line of reasoning as to why an artisan would have found the claimed invention to have been obvious in light of the teachings of the three cited references. None of Carter, Janssens, or Smith, alone or in combination, are even remotely relevant to a policy evaluation mechanism configured to evaluate policies to provide automated computer system administration in an information technology (IT) environment, as recited in claim 1.

In the Final Office Action, the Examiner states that "there is no requirement that a motivation to make the modification be expressly articulated", and that "the test for combining references is not what individual references themselves suggest but rather

what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art", and that "references are evaluated by what they suggest to one versed in the art, rather than by specific disclosures." Applicant replies that, since it is clear that the cited references either alone or in combination **do not teach or suggest the notion of the application of two or more inference techniques for any one purpose, and specifically do not teach or suggest the notion of evaluating the same policy using two or more different inference techniques** as is recited in claim 1 of the present application, the "combination of disclosures taken as a whole" **would not and could not suggest anything like what is recited in claim 1**. Moreover, while a motivation may be implicit in the art, the Examiner must still show how the motivation is implicitly found in the art. Conclusory statements by the Examiner are not acceptable. "The need for specificity pervades this authority." *In re Sang Su Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002). "Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." *In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

Thus, for at least the reasons presented above, the rejection of claim 1 is not supported by the cited prior art and removal thereof is respectfully requested. Similar remarks as those above regarding claim 1 also apply to claims 6, 11, 14, 16, 21, 22 and 26.

In regard to claim 29, similar remarks as those above regarding claim 1 also apply. In addition, Applicant notes that nowhere in Carter is the concept of a 'decision engine' even mentioned. In Figure 3, cited by the Examiner, Carter, in paragraph [0364], discloses that "FIG. 3 is a schematic depiction of examples of processes within the four layers of the Network Surveillance and Security System 310." Nowhere does Carter disclose that the processes are "decision engines" as recited in claim 29. Therefore, Applicant traverses the Examiner's assertion that Carter teaches or suggests a plurality of decision engines as disclosed in claim 29. Further, paragraph [0880] of Carter simply discloses a "process scheduler", and does not teach or suggest anything like "a central

decision engine configured to provide automated administration of the IT environment according to one or more high-level policies for the IT environment." Therefore, Applicant traverses the Examiner's assertion that Carter teaches or suggests a central decision engine as disclosed in claim 29.

In the Final Office Action, in response to the above argument, the Examiner states that " 'Plurality of decision engines' of applicant is equivalent to 'genetic algorithms' of Carter. Genetic algorithms make decisions concerning 'survival of the fittest', 'crossover', and 'mutation'." Contrary to the Examiner's definition, the purpose of genetic algorithms is not to "make decisions concerning 'survival of the fittest', 'crossover', and 'mutation'." A more suitable and correct definition of genetic algorithms is that a genetic algorithm is a search technique that may be used in computing to find solutions to optimization and search problems. Genetic algorithms use 'genetic' techniques such as inheritance, mutation, selection, and crossover, they do not "make decisions concerning" those techniques. In any case, based on the Examiner's (incorrect) description of what genetic algorithms do, genetic algorithms as disclosed by Carter are clearly not equivalent to the decision engines as recited in claim 29. Further, based on the more correct definition of genetic algorithms, genetic algorithms are still clearly not equivalent to the decision engines as recited in claim 29.

Furthermore, Carter, in FIG. 3 and [0369], is describing an Expert System Security Intelligence Layer (ESSIL). The ESSIL may include an Executive sub-layer, a Neural Network Executive Layer, and a Genetic Programming Algorithms Executive Layer, along with various "sublayers." The 'genetic algorithms' of Carter are described as a "layer" in an ESSIL. Carter does not describe anything like "one or more genetic algorithms and a central genetic algorithm" that would teach or suggest anything like the plurality of decision engines including one or more local decision engines and a central decision engine as recited in claim 29. Further, Carter certainly does not teach or suggest, in the cited paragraph and Figure or elsewhere, anything like using two or more different inference techniques to evaluate policies.

Applicant also asserts that numerous ones of the independent and dependent claims recite further distinctions over the cited art. However, since the rejections have been shown to be unsupported for the independent claims, a further discussion of the dependent claims is not necessary at this time.

CONCLUSION

Applicants submit the application is in condition for allowance, and prompt notice to that effect is respectfully requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5760-20800/RCK.

Respectfully submitted,

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